



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,638	12/19/2001	John Bankier	E003-1101US0	5044
48789	7590	11/16/2007		
LAW OFFICES OF BARRY N. YOUNG			EXAMINER	
260 SHERIDAN AVENUE			TRUONG, LAN DAI T	
SUITE 410				
PALO ALTO, CA 94306-2047			ART UNIT	PAPER NUMBER
			2152	
			MAIL DATE	DELIVERY MODE
			11/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/029,638

Applicant(s)

BANKIER ET AL.

Examiner

Lan-Dai Thi Truong

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is response to communications filed 12/19/2001; Applicant's arguments filed 08/23/2007. Claims 1-17, 19-56 are pending; claims 1, 11, 14, 19, 25, 28, 33, 37, 43, 51-56 are amended; claim 18 is cancelled

2. Applicant's arguments filed 08/23/2007 have been fully considered, but new amended claims are moot in view of the new ground(s) of rejections

### Response to Arguments

3. Regarding applicant's arguments with respect to Lin does not disclose e-commercial transaction are not persuasive; Lin discloses communications between a web-browser and an application server for online transaction; As one of ordinary skill in that art would know that the communications through web-browser have applicability and utility in either commercial or non-commercial electronic transactions

4. In response to applicant's arguments that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., electronic commerce transaction comprising request and response message) are not recited in the rejected claim(s), particularly in the emphasized phase. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

5. In response to applicant's arguments that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., determining

whether an outcome of the electronic commerce transaction in relation to a request message has failed, and the actual state at failure) are not recited in the rejected claim(s), particularly in the emphasized phase. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6. In response to applicant's arguments that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., transmitting a response message to the client that masks the failure by providing an expected response to the request message) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

7. In response to applicant's arguments that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., selecting a recovery action based on the actual state of an e-commerce transaction at failure) are not recited in the rejected claim(s), particularly in the emphasized phase. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Moreover, even this feature was in the claim, Frolund clearly teaches a recovery action will be taken in response to recognizing a failure: abstract; column 2, lines 1-7, 17-26)

8. In response to applicant's arguments that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., determining whether an outcome of a transaction has failed, much less selecting an appropriate recovery

action based upon the actual state of the transaction at the failure) are not recited in the rejected claim(s), particularly in the emphasized phase. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. In response to applicant's arguments with respect to the Frolund does not teach selecting recovery action based upon the actual state of a transaction at a failure are not persuasive; Frolund clearly discloses technique of discovering transaction outcomes to determine a failure and select recovering action, see (abstract; figure 3, items 216, 222; column 3, lines 37-64; column 6, lines 1-50; column7, lines 1-52)

10. In response to applicant's arguments with respect to the differences between Kashyup and feature of "failure of commerce". Because new scopes of amended claims now rejected under new combination of references, so the response is not need; and also the feature was not in the rejected claim

11. In response to applicant's arguments with respect to the differences between Barker and feature of "transaction state". Because new scopes of amended claims now rejected under new combination of references, so the response is not need.

### **Claim rejections-35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 6-10, 12-15 are rejected under 35 U.S.C 103(a) as being un-patentable over Lin et al. (U.S. 2002/0073211) in view of Frolund et al. (U.S. 6,381,617) and further in view of Judd et al. (U.S. 5,958,064)**

**Regarding claim 1:**

Lin discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for processing electronic transactions between a client and a server of a computer network, the method comprising:

establishing a communications connections between the network client and the network server at an electronic transaction assurance (eTA) system: (in Lin's communication system, "a load balancer" which shares functionality with an electronic transaction assurance (eTA) as claimed establishes and controls communication connections between network users and web servers: figure 2, items 128, 102, 104, 106, 130, 132, and 134: abstract; figure 6; [0027])

receiving a request message from the client at the eTA, the request message relating to an aspect of electronic commerce transaction: (Lin discloses communications between a web-browser, an application server and network users for online transactions; therefrom the load balancer receives browser requests from the network users for online transactions and forwards the browser requests to desired web servers. As one of ordinary skill in that art would know that the communications through web-browser have applicability and utility in either commercial or non-commercial electronic transactions: Lin: [0032])

extracting data from the request message to record a state of the electronic commerce transaction: (Lin discloses communication sessions between the network users and the web servers are monitored, and data relates to information session is stored in state server as retaining records of sessions: [0028], lines 11-15)

However, Lin does not explicitly disclose detecting that a failure has occurred with respect to the electronic commerce transaction

In analogous art, Frolund discloses detecting transaction failures and provide recoveries for the transaction failures; the transactions in Frolund can be reservation, car rentals, finance...etc., see (abstract; figure 3, items 216, 222; column 3, lines 37-64; column 6, lines 1-50; column7, lines 1-52)

determining whether an outcome of the electronic commerce transaction in relate to the request message has failed: (Frolund discloses a three-tiered transaction processing system which detects transaction failures and provide recoveries for the transaction failures; therein, outcomes of transactions are detected to determine if transactions is successful or failed in order to provide an appropriate recovery actions: (abstract; figure 3, items 216, 222; column 3, lines 37-52, 63-64; column 6, lines 1-50; column7, lines 1-52)

selecting an appropriate recovery action to recover from the failure: (in Frolund's system, a recovery action will be taken in response to detected failure recognized: abstract; column 2, lines 1-7, 17-26)

actual state of the electronic commerce transaction at the failure: (the outcomes also is interpreted as sharing functionality with "actual state" as claimed: Frolund: column 2, lines 58-63; column 3, lines 37-52, 63-64; column 6, lines 1-50; column7, lines 1-52)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Frolund's ideas of detecting transactions/outcomes failures in order to provide appropriate recovery actions with Lin's system in order to increase efficiencies for data transaction processing system e.g. highly available solutions for detected connection failures, see (Frolund: column 4, lines 1-12)

However, Lin- Frolund does not explicitly disclose transmitting a response message to the client in accordance with the recovery action, wherein the response message masks the failure from the client by providing an expected response to the request message from the client

In analogous art, Judd discloses method for retransmitting expected data frame to replace the previous error data frame which was discarded for recovering faulty link purpose, see (column 2, lines 18-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Judd's ideas of retransmitting expected data frame to replace the previous error data frame which was discarded for recovering faulty link with Lin- Frolund's system in order to increase efficiencies for communication system e.g. guarantee complete transaction, see (column 2, lines 1-16)

**Regarding claims 6 and 7:**

In addition to rejection in claim 1, Lin-Frolund-Judd further discloses failure from error code in message and not receiving response message: (Frolund: figure 4, item 318)

**Regarding claims 8 and 10, 12-13:**

Those claims are rejected under rationale of claim 1

**Regarding claim 9:**



In addition to rejection in claim 1, Lin-Frolund-Judd further discloses re-directing to another server for recovery action: Lin discloses method for recovering failure of a webserver by re-directing a process to another webserver: (Lin: [0035])

**Claims 2-5 are rejected under 35 U.S.C 103(a) as being un-patentable over *Lin-Frolund-Judd* in view of *Watson et al.* (U.S. 5,991,750)**

**Regarding claims 2-3:**

Lin-Frolund-Judd discloses the invention substantially as disclosed in claim 1, but does not explicitly teach identifying a transaction type associated with the electronic transaction

In analogous art, Watson discloses method for associating transaction types and requesting types: (column 10, lines 10-67; column 11, lines 1-20; claim 13)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Watson's ideas of associating transaction types and requesting types with Lin-Frolund-Judd's system in order to provide an efficient account manager system, see (Watson: column 3, lines 35-44)

**Regarding claims 4-5:**

Those claims are rejected under rationale of claim 1

**Regarding claim 14:**

Lin discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for processing electronic transactions between a client and a server of a computer network, the method comprising:

a transaction monitoring process wherein the eTA system monitors electronic commerce message exchanged between the client and the server in relation to a transaction: (in Lin's communication system, "a load balancer" which shares functionality with (eTA) as claimed monitors and controls communication connections between network users and web servers: figure 2, items 128, 102, 104, 106, 130, 132, and 134: abstract; figure 6; [0027])

a state capture process wherein the eTA system captures and records information descriptions of one or more states of transaction: (Lin discloses communication sessions between the users and the web servers are monitored, and data relates to information session is stored in state server as retaining records of session: [0028], lines 11-15)

However, Lin does not explicitly disclose detecting that a failure has occurred with respect to the electronic commerce transaction

In analogous art, Frolund discloses detecting transaction failures and provide recoveries for the transaction failures; the transactions in Frolund can be reservation, car rentals, finance...etc., see (abstract; figure 3, items 216, 222; column 3, lines 37-64; column 6, lines 1-50; column7, lines 1-52)

an outcome determination process: (Frolund discloses a three-tiered transaction processing system which detects transaction failures and provide recoveries for the transaction failures; therein, outcomes of transactions are detected to determine if transactions is successful or failed in order to provide an appropriate recovery actions: In analogous art, Frolund discloses a three-tiered transaction processing system which detects transaction failures and provide recoveries for the transaction failures; therein, outcomes of transactions are detected to determine if transactions is successful or failed in order to provide an appropriate recovery actions:

Art Unit: 2152

(abstract; figure 3, items 216, 222; column 3, lines 37-52, 63-64; column 6, lines 1-50; column7, lines 1-52)

actual state of the electronic commerce transaction at the failure: (the outcomes also is interpreted as sharing functionality with “actual state” as claimed: Frolund: column 2, lines 58-63; column 3, lines 37-52, 63-64; column 6, lines 1-50; column7, lines 1-52)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Frolund’s ideas of detecting transactions/outcomes failures in order to provide appropriate recovery actions with Lin’s system in order to provide an efficiencies for data transaction processing system e.g. highly available solutions for detected connection failures, see (Frolund: column 4, lines 1-12)

However, Lin- Frolund does not explicitly discloses transmitting a response message to the client in accordance with the recovery action, wherein the response message masks the failure from the client by providing an expected response to the request message from the client

In analogous art, Judd discloses method for retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link purpose, see (column 2, lines 18-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Judd’s ideas of retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link with Lin- Frolund’s system in order to increase efficiencies for communication system e.g. guarantee complete transaction, see (column 2, lines 1-16)

**Regarding claim 15:**

Lin-Frolund-Judd discloses a method as discussed in claim 14, which further includes, wherein the state capture process comprises capturing packets contained in electronic request messages from the client to the server and storing the packets with an identifier associated with a particular transaction between the client and the server: (Lin discloses "Session ID" which is equivalent to "identifier associated with transaction between the client and the server": figure 5, item 510)

**Claims 16-17 are rejected under 35 U.S.C 103(a) as being un-patentable over Lin-Frolund-Judd in view of Phaal (U.S. 6,138,159)**

**Regarding claim 16:**

Lin-Frolund-Judd discloses the invention substantially as disclosed in claim 14, but does not explicitly teach wherein the failure detection process comprises monitoring for a failure code that is embedded in a response message from the server, wherein the failure code indicates that a failure has occurred, see (Phaal discloses method for detecting failure in network upon failure to respond within a predetermined period: column 2, lines 61-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Phaal's ideas of determining whether the transaction in relation to the request message has succeeded or failed with Lin-Frolund-Judd's system in order to be able to discover the broken connection to provide connection failure recovery in order to process of client request without interrupt notwithstanding failure of individual host, see (Phaal: abstract, lines 1-10)

**Regarding claim 17:**

Lin-Frolund-Judd discloses the invention substantially as disclosed in claim 14, but does not explicitly teach wherein the failure detection process comprises monitoring for a response message from the server and deeming that a failure has occurred if a response message is not received within a predetermined time span, see (Phaal discloses method for detecting failure in network upon on failure to respond within a predetermined period: column 2, lines 61-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Phaal's ideas of determining whether the transaction in relation to the request message has succeeded or failed with Lin-Frolund-Judd's system in order to be able to discover the broken connection to provide connection failure recovery in order to process of client request without interrupt notwithstanding failure of individual host, see (Phaal: abstract, lines 1-10)

**Claim 11 is rejected under 35 U.S.C 103(a) as being un-patentable over Lin-Frolund-Judd in view of Kim et al. (U.S. 2001/0011235)**

**Regarding claim 11:**

Lin-Frolund-Judd discloses the invention substantially as disclosed in claim 1, but does not explicitly teach recording the contents of the shopping cart

In analogous art, kim discloses recording customer's shopping carts, see ([0022])

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine kim's ideas of recording customer's shopping carts into Lin-Frolund-Judd's system in order to provide more benefits for online commercials, see (Phaal: abstract, lines 1-10)

**Claims 19, 21-32, 51-52 are rejected under 35 U.S.C 103(a) as being un-patentable over Lin-Frolund-Judd in view of Watson et al. (U.S. 5,991,750)**

**Regarding claim 19:**

Lin discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for processing electronic transactions between a client and a server of a computer network, the method comprising:

establishing a communications connections between the network client and the network server at an electronic transaction assurance (eTA) system: (in Lin's communication system, "a load balancer" which shares functionality with an electronic transaction assurance (eTA) as claimed establishes and controls communication connections between network users and web servers: figure 2, items 128, 102, 104, 106, 130, 132, and 134: abstract; figure 6; [0027])

receiving a request message from the client at the eTA, the request message relating to an aspect of electronic commerce transaction: (the load balancer receives "browser request" which shares functionality with electronic commerce transaction as claimed from users: Lin: [0032])

preserving a state of the electronic commerce transaction; updating electronic commerce transaction: (Lin discloses communication sessions between the users and the web servers are monitored, and data relates to information session is stored in state server as retaining records of session: [0028], lines 11-15)

logging and reporting relevant information about the state and the message parameter of the transaction commerce transaction: (data relates to information session is stored in state server as retaining records of session: Lin: [0028], lines 11-15)

However, Lin does not explicitly disclose detecting that a failure has occurred with respect to the electronic commerce transaction in response to inspection of the content of a received response from back-end system servers or the lack of a received response within a predetermined time period

In analogous art, Frolund discloses detecting transaction failures and provide recoveries for the transaction failures; the transactions in Frolund can be reservation, car rentals, finance...etc., see (abstract; figure 3, items 216, 222; column 3, lines 37-64; column 6, lines 1-50; column7, lines 1-52)

an outcome determination process: (Frolund discloses a three-tiered transaction processing system which detects transaction failures and provide recoveries for the transaction failures; therein, outcomes of transactions are detected to determine if transactions is successful or failed in order to provide an appropriate recovery actions: In analogous art, Frolund discloses a three-tiered transaction processing system which detects transaction failures and provide recoveries for the transaction failures; therein, outcomes of transactions are detected to determine if transactions is successful or failed in order to provide an appropriate recovery actions: (abstract; figure 3, items 216, 222; column 3, lines 37-52, 63-64; column 6, lines 1-50; column7, lines 1-52)

actual state of the electronic commerce transaction at the failure: (the outcomes also is interpreted as sharing functionality with "actual state" as claimed: Frolund: column 2, lines 58-63; column 3, lines 37-52, 63-64; column 6, lines 1-50; column7, lines 1-52)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Frolund's ideas of detecting transactions/outcomes failures in

order to provide appropriate recovery actions with Lin's system in order to provide an efficiencies for data transaction processing system e.g. highly available solutions for detected connection failures, see (Frolund: column 4, lines 1-12)

However, Lin- Frolund does not explicitly discloses transmitting a response message to the client in accordance with the recovery action, wherein the response message masks the failure from the client by providing an expected response to the request message from the client

In analogous art, Judd discloses method for retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link purpose, see (column 2, lines 18-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Judd's ideas of retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link with Lin- Frolund's system in order to increase efficiencies for communication system e.g. guarantee complete transaction, see (column 2, lines 1-16)

However, Lin-Frolund- Judd does not explicitly discloses identifying a transaction type and message parameters included in the received message, thereby defining electronic transaction to which the message relates

In analogous art, Watson discloses method for associating transaction types and requesting types: (column 10, lines 10-67; column 11, lines 1-20; claim 13)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Watson's ideas of associating transaction types and requesting



types with Lin-Frolund- Judd's system in order to provide an efficient transaction, recovery system, see (Frolund: column 4, lines 30-35)

**Regarding claims 51-52:**

Those claims are rejected under rationale of claim 19

**Regarding claims 21-32:**

Those claims are rejected under rationale of claim 19

**Claim 20 is rejected under 35 U.S.C 103(a) as being un-patentable over Lin- Lin-Frolund-Judd-Watson in view of Tanner et al. (U.S. 2002/0070976)**

**Regarding claim 20:**

Lin-Frolund-Judd-Watson discloses the invention substantially as disclosed in claim 19, but does not explicitly teach wherein the communications connection is a secure connection, see (Tanner discloses "secure channel" which is equivalent to "secure connection" used for transaction between user account and vendor account: [0051])

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Tanner's ideas of using secure channel for process transaction with Lin-Frolund-Judd-Watson with's system in order to provide secure network

**Claims 43-45, 47-50 and 55-56 are rejected under 35 U.S.C 103(a) as being un-patentable over Lin-Frolund-Judd-Watson in view of Blott et al. (U.S. 6,341,285)**

**Regarding claim 43:**

Lin discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for processing electronic transactions between a client and a server of a computer network, the method comprising:

establishing a communications connections between the network client and the network server at an electronic transaction assurance (eTA) system: (in Lin's communication system, "a load balancer" which shares functionality with an electronic transaction assurance (eTA) as claimed establishes and controls communication connections between network users and web servers: figure 2, items 128, 102, 104, 106, 130, 132, and 134: abstract; figure 6; [0027])

receiving a request message from the client comprising a request for webpage: (the load balancer receives "browser request" which shares functionality with electronic commerce transaction as claimed from users: Lin: [0032])

preserving a state of the electronic commerce transaction; updating electronic commerce transaction: (Lin discloses communication sessions between the users and the web servers are monitored, and data relates to information session is stored in state server as retaining records of session: [0028], lines 11-15)

However, Lin does not explicitly discloses commercial transaction

In analogous art, Frolund discloses a three-tiered transaction processing system which detects transaction failures and provide recoveries for the transaction failures i.e. airline reservation transaction...etc.: (abstract; figure 3, items 216, 222; column 3, lines 37-52, 63-64; column 6, lines 1-50; column7, lines 1-52)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Frolund's ideas of detecting transactions/outcomes failures in order to provide appropriate recovery actions with Lin's system in order to provide an efficiencies for data transaction processing system e.g. highly available solutions for detected connection failures, see (Frolund: column 4, lines 1-12)

However, Lin- Frolund does not explicitly disclose resuming the electronic transaction from a failure based upon the preserved state of the failure and masking the failure by providing an expected response to the request message from the client

In analogous art, Judd discloses method for retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link purpose, see (column 2, lines 18-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Judd's ideas of retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link with Lin- Frolund's system in order to increase efficiencies for communication system e.g. guarantee complete transaction, see (column 2, lines 1-16)

However, Lin- Frolund -Judd does not explicitly disclose identifying a transaction type and message parameters included in the received message, thereby defining electronic transaction to which the message relates

In analogous art, Watson discloses method for associating transaction types and requesting types: (column 10, lines 10-67; column 11, lines 1-20; claim 13)

Generating transaction identifier and storing the transaction identifier information with transaction type and message: (Watson: figure 3; figure 5)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Watson's ideas of associating transaction types and requesting

Art Unit: 2152

types with Lin- Frolund -Judd's system in order to provide an efficient transaction, recovery system, see (Frolund: column 4, lines 30-35)

However Lin-Judd- Watson does not explicitly disclose recording the time when a request message is sent by the network client, indicating that start of an electronic transaction, and when a response message is received b the network client indicate the end of electronic transaction

Blott discloses timestamps included in transmitting data used to determine performance of transaction, see (abstract)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Blott's ideas of using timestamps included in transmitting data to determine performance of transaction into Lin- Frolund -Judd- Watson system in order to save resources and development time

**Regarding claims 55-56:**

Those claims are rejected under rationale of claim 43

**Regarding to claims 44-45, 50:**

Those claims are rejected under rationale of claim 43

**Regarding claims 47-49:**

In addition to rejection in claim 43, Lin-Judd- Watson- Blott further discloses wherein the eTA system includes multiple eTA nodes, see (Lin: abstract)

**Claim 46 is rejected under 35 U.S.C 103(a) as being un-patentable over Lin- Lin-Judd- Watson- Blott in view of Shkedi (U.S. 6,832,207)**

**Regarding claim 46:**

Lin-Judd- Watson- Blott discloses the invention substantially as disclosed in claim 37, but does not explicitly teach storing the transaction identifier comprises inserting information into the back end server database using an Internet cookie, see (Shkedi: column 4, lines 20-27)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Shkedi's ideas of storing information is cookie with Lin-Judd- Watson- Blott's system in order to be able to use the cookie as recognition message, see see (Shkedi: column 4, lines 20-27)

**Claims 37-42, 53-54 are rejected under 35 U.S.C 103(a) as being un-patentable over Lin- Frolund- Judd in view of Watson et al. (U.S. 5,991,750)**

**Regarding claim 37:**

Lin discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for processing electronic transactions between a client and a server of a computer network, the method comprising:

establishing a communications connections between the network client and the network server at an electronic transaction assurance (eTA) system: (in Lin's communication system, "a load balancer" which shares functionality with an electronic transaction assurance (eTA) as claimed establishes and controls communication connections between network users and web servers: figure 2, items 128, 102, 104, 106, 130, 132, and 134: abstract; figure 6; [0027])

receiving a network related to electronic transaction at the eTA, which is responsible for the communications between the network client an the network server: (the load balancer

receives "browser request" which shares functionality with electronic commerce transaction as claimed from users: Lin: [0032])

preserving a state of the electronic commerce transaction; updating electronic commerce transaction: (Lin discloses communication sessions between the users and the web servers are monitored, and data relates to information session is stored in state server as retaining records of session: [0028], lines 11-15)

However, Lin does not explicitly discloses commercial transaction

In analogous art, Frolund discloses a three-tiered transaction processing system which detects transaction failures and provide recoveries for the transaction failures i.e. airline reservation transaction...etc.: (abstract; figure 3, items 216, 222; column 3, lines 37-52, 63-64; column 6, lines 1-50; column7, lines 1-52)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Frolund's ideas of detecting transactions/outcomes failures in order to provide appropriate recovery actions with Lin's system in order to provide an efficiencies for data transaction processing system e.g. highly available solutions for detected connection failures, see (Frolund: column 4, lines 1-12)

However, Lin- Frolund does not explicitly discloses resuming the electronic transaction from a failure based upon the preserved state of the failure and masking the failure by providing an expected response to the request message from the client

In analogous art, Judd discloses method for retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link purpose, see (column 2, lines 18-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Judd's ideas of retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link with Lin- Frolund's system in order to increase efficiencies for communication system e.g. guarantee complete transaction, see (column 2, lines 1-16)

However, Lin – Frolund- Judd does not explicitly disclose identifying a transaction type and message parameters included in the received message, thereby defining electronic transaction to which the message relates

In analogous art, Watson discloses method for associating transaction types and requesting types: (column 10, lines 10-67; column 11, lines 1-20; claim 13)

Generating transaction identifier and storing the transaction identifier information with transaction type and message: (Watson: figure 3; figure 5)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Watson's ideas of associating transaction types and requesting types with Lin- Frolund- Judd's system in order to provide an efficient transaction, recovery system, see (Frolund: column 4, lines 30-35)

**Regarding claims 53-54:**

Those claims are rejected under rationale of claim 37

**Regarding claims 38-42:**

Those claims are rejected under rationale of claim 37

**Claim 33 is rejected under 35 U.S.C 103(a) as being un-patentable over Lin et al. (U.S. 2002/0073211) in view of Kashyap (U.S. 2002/0087912) and further in view of Barker (U.S. 6,065,017) and further in view of Judd et al. (U.S. 5,958,064)**

**Regarding claim 33:**

Lin discloses the invention substantially as claimed, including a system, which can be implemented in a computer hardware or software code for processing electronic transactions between a client and a server of a computer network, the method comprising:

A communications processor that receives electronic transaction messages over a computer network between a customer at a client node and a server node: (Lin discloses “a webserver” which is equivalent to “a communications processor” receives “web-browser’s request” which is equivalent to “the request message” prior a connection will be made to one or more application server in order for the web browsers/the users to access the application servers for online information services”: [0031], lines 5-16; [0030], lines 8-12; [0028], lines 11-15; [0066]-[0067])

However, Lin does not explicitly disclose a policy providing conditions of failover

In analogous art, Kashyap discloses a fail-over policy: [0026]) or (20040230660: [0025])

However, Lin-Kashyap does not explicitly disclose policy-based policy manager engine allowing users of the system to define message processing policies

In analogous art, Barker discloses database recovery system is accessed and managed by a network administrator: (column 2, lines 15-21; column 7, lines 60-67; column 15, lines )

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Kashyap’s ideas of using fail-over policy for recovery



connection failures and Barker's ideas of the recovery policy is defined by users with Lin's system in order to provide efficient recovery system, see (Kashyap, [0015])

However, Lin- Frolund does not explicitly masking failure from the customer, said masking comprising providing a response message to the customer

In analogous art, Judd discloses method for retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link purpose, see (column 2, lines 18-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Judd's ideas of retransmitting expected frame to replace the previous error frame which was discarded for recovering faulty link with Lin- Kashyap- Barker's system in order to increase efficiencies for communication system e.g. guarantee complete transaction, see (column 2, lines 1-16)

**Claim 34 is rejected under 35 U.S.C 103(a) as being un-patentable over Lin- Kashyap-Barker- Judd in view of Phaal (U.S. 6,138,159)**

**Regarding claim 34:**

Lin-Kashyap-Barker- Judd discloses the invention substantially as disclosed in claim 33, but does not explicitly teach if needed to keep the customer informed of any processing delays and keep the customer engaged in a message dialog to enhance the customer's interaction experience with an e-business Web site at the server node

In analogous art, Phaal discloses normally client computer directs communication to the assigned server, but if a failure condition of assigned server is detected, a new server is assigned to service the client computer: (abstract, lines 11-20)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Phaal's ideas of determining whether the transaction in relation to the request message has succeeded or failed with Lin-Kashyap-Barker- Judd's system in order to be able to discover the broken connection to provide connection failure recovery in order to process of client request without interrupt notwithstanding failure of individual host, see (Phaal: abstract, lines 1-10)

**Claims 35-36 are rejected under 35 U.S.C 103(a) as being un-patentable over Lin-Kashyap-Barker- Judd - Phaal in view of Wallach et al. (U.S. 6,292,905)**

**Regarding claims 35-36:**

Lin-Kashyap-Barker- Judd - Phaal discloses the invention substantially as disclosed in claim 34, but does not explicitly teach policy manager engine

In analogous art, Wallach discloses the replicated database to provide failure connection recovery rules: (column 5, lines 65-67; column 6, lines 1-10; figure 1, items 88a-88c)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Wallach's ideas of using the replicated database to provide failure connection recovery rules with Lin-Kashyap-Barker- Judd - Phaal's system in order to provide to provide a improvement of performance of network such as uninterrupted connection, see (Wallach: column 2, lines 33-47)

The prior arts made of records and not relied upon are considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Highly available transaction failure detection and recovery for electronic commerce transactions": 6018805; 6108700; 20020147797; 5287501; 6335972; 6249866

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### **Conclusions**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan-Dai Thi Truong whose telephone number is 571-272-7959. The examiner can normally be reached on Monday- Friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob A. Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

11/12/2007



BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER

11/13/7